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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/105,705	06/26/1998	THOMAS JOKERST	4172-4913	5902

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EXAMINER

HAM, SEUNGSOOK

ART UNIT	PAPER NUMBER
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2817

DATE MAILED: 05/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/105,705

Applicant(s)

JOKERST, THOMAS

Examiner

Seungsook Ham

Art Unit

2817

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 February 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,2,4-6,13-21 and 23-27 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,2,4-6 and 23-26 is/are allowed.
- 6) ☒ Claim(s) 13-21 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Drawings

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the subject matter of claim 1, (lines 16-23, "a grounding conductor having first and second grounding conductor ends,... the first grounding conductor end being electrically coupled to the ground block in a manner such that the first grounding conductor end is electrically coupled to the second outer shield end of the input coaxial cable...to the ground reference source") must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

It should be note that the formal drawing filed on 5/3/1999 has been inadvertently damaged by the PTO. The examiner requests to submit a new set of formal drawing.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 18 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Mizuno et al. (JP '035).

Mizuno et al. (fig. 2) discloses a ferrite form 20 (i.e., a ferromagnetic material) with ground conductor 22 wound therearound. Ground conductor 22 is connected at one end to the outer shield 12 of the coaxial cable C1 (see fig. 1). Figure 2 also schematically shows insulation on wire 22. The ground conductor 22 is inherently capable of functioning as ground and attenuates RF interference (i.e., high frequency noise – see abstract).

In response to the applicant's argument (see REMARKS filed on 2/3/03, page 8) that the Mizuno et al. does not show the step of modifying an existing network by inserting a choke, the examiner respectfully disagrees.

Mizuno et al. clearly shows choke 22 is provided in the coaxial network. Moreover, Mizuno et al. clearly teaches that the choke/ferrite cores U1, U2 are provided to remove the noise (see abstract). Thus, Mizuno et al. clearly shows the "connecting an RF choke in series with the shield and the ground reference source."

Claims 18 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Aceves et al. (US '844).

Aceves et al. (figs. 1 and 2) discloses a coaxial cable with outer conductor 4 that is connected between two sites (i.e., an antenna and radio receiver). An RF choke 11 is connected between the outer conductor 4 and ground shown in fig. 2 (see page 2, lines 41-43). With respect to claim 16, the Aceves et al. teaches that the coil 11 attenuates frequencies of greater than 3 MHz (page 2, right-hand col., lines 24-37).

In response to the applicant's argument (see REMARKS filed on 2/3/03, page 9) that the Aceves et al. does not show the step of modifying an existing network by inserting a choke, the examiner respectfully disagrees.

Aceves et al. clearly shows choke 11 is provided in the coaxial network. Moreover, Aceves et al. clearly teaches that the choke 11 is provided to remove the noise (page 2, right-hand col., lines 56-75). Moreover, Aceves et al. teaches that choke 11 is provided if desired (page 2, left-hand col., lines 58-62). Thus, Aceves et al. clearly shows the "connecting an RF choke in series with the shield and the ground reference source."

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 19, 20 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aceves et al. (US '844) or Mizuno et al. (JP 035).

Aceves et al. discloses a choke 11 (that may be formed of a toroid or any convenient form, p 2, right-hand col., lines 57-64) between the outer conductor 4 and the ground 7, but does not disclose a ferrite form and solid conductor. However, ferrite forms in the shape of toroids with wires wrapped around or beads that encompass the wire are conventional forms used in forming inductors. Moreover, insulated wire is

Art Unit: 2817

conventionally used in order to prevent short-circuiting between the windings in a wound toroid.

Accordingly, it would have been obvious to one of ordinary skill in the art to have formed the RF choke 11 out of insulated wire wound around a ferrite core (e.g., the well-known type 77) or with a conventional ferrite bead because, as the reference is silent on the exact specifics of the choke coil 11, any art-recognized equivalent core/coil would have been usable therewith such as the well known type 77 ferrite.

Mizuno et al. also shows using insulated wire to form a toroid. It would have been obvious as a matter of design choice to use a solid conductor covered with an insulated outer surface since such conductor structure is well known in the art.

Regarding to claim 27, it would have been obvious as a matter of design choice to disconnect the ground wire from one of shield and the ground reference source in the device of Mizuno et al. or Aceves et al. as one desires, and such method requires only a routine skill in the art.

Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Aceves et al. (US '844) in view of Rodrigues et al. (US '957).

Aceves et al. is applied as above. Aceves et al. does not show the coaxial network configured for transmission of two-way RF signals. However, two-way radio module is well known in the art. Rodrigues et al. (fig. 6) discloses a well known two-way radio module with imbedded RF choke (col. 10, lines 56-61). Thus, it would have been obvious to one of ordinary skill in the art to use two-way radio signals to receive and

transmit the RF signals since such two-way radio module is well known in the art as shown by Rodrigues et al.

Regarding claim 16, attenuating the RF choke within 5 MHz to 42 MHz is considered as a matter of design choice since value of RF choke can be varied to attenuate the unwanted signal as one desires and requires only a routine skill in the art.

Allowable Subject Matter

Claims 1, 2, 4-6 and 23-26 are allowed.

The following is an examiner's statement of reasons for allowance: the prior art does not show nor suggest the subject matter of claim 1, lines 16-23, "a grounding conductor having first and second grounding conductor ends,... the first grounding conductor end being electrically coupled to the ground block in a manner such that the first grounding conductor end is electrically coupled to the second outer shield end of the input coaxial cable...to the ground reference source" in conjunction with input and output coaxial cables and the ground block recited in claim 1, lines 2-15.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Seungsook Ham whose telephone number is (703) 308-4090. The examiner can normally be reached on Monday - Thursday from 8:00 A.M. to 5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert J. Pascal can be reached on (703)308-4909. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

Art Unit: 2817

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)308-0956.



Seungsook Ham
Primary Examiner
Art Unit 2817

sh
April 28, 2003